

## **807 KAR 5:022. Gas service.**

RELATES TO: KRS 278.485

STATUTORY AUTHORITY: KRS 278.040(3), 278.280(2)

NECESSITY, FUNCTION, AND CONFORMITY: KRS 278.040(3) authorizes the Public Service Commission to adopt reasonable administrative regulations to implement the provisions of KRS Chapter 278 and to investigate methods and practices of utilities subject to commission jurisdiction. KRS 278.280(2) requires the commission to prescribe rules for the performance of any service or the furnishing of any commodity by any utility. This administrative regulation establishes general rules which apply to gas utilities.

### **Section 1. Definitions.**

(1) "British thermal unit (BTU)" means quantity of heat that is required to be added to one (1) pound of pure water to raise its temperature from fifty-eight and one-half (58.5) degrees Fahrenheit to fifty-nine and one-half (59.5) degrees Fahrenheit at the absolute pressure of a column of pure mercury thirty (30) inches high at thirty-two (32) degrees Fahrenheit under standard gravity (32.174 ft. per sec-sec).

(2) "Commission" means the Public Service Commission.

(3) "Cubic foot of gas" means the following:

(a) If gas is supplied and metered to customers at standard distribution pressure, a cubic foot of gas means that volume of gas which, at the temperature and pressure existing in the meter, occupies one (1) cubic foot.

(b) If gas is supplied to customers through turbine, orifice, or positive displacement meters at other than standard distribution pressure, a cubic foot of gas means that volume of gas which, at sixty (60) degrees Fahrenheit and at absolute pressure of 14.73 pounds per square inch, (thirty (30) inches of mercury), occupies one (1) cubic foot; except if different bases that are considered by the commission to be fair and reasonable are provided for in gas sales contracts or in rules or practices of a utility, these different bases shall be effective.

(c) The standard cubic foot of gas for testing the gas itself for heating value means the volume of gas that occupies one (1) cubic foot if:

1. Saturated with water vapor and at temperature of sixty (60) degrees Fahrenheit; and
2. Under pressure equivalent to that of thirty (30) inches of mercury (mercury at thirty-two (32) degrees Fahrenheit and under standard gravity) occupies one (1) cubic foot.

(4) "Meter" means any device used to measure the quantity of gas delivered by utility to a customer.

(5) "Service line" means a distribution line that:

(a) Transports gas from a common source of supply to:

1. An individual customer;
2. Two (2) adjacent or adjoining residential or small commercial customers; or
3. Multiple residential or small commercial customers served through a meter header or manifold; and

(b) Ends at the:

1. Outlet of the customer meter or connection to a customer's piping, whichever is farther downstream; or
2. Connection to a customer's piping if there is no customer meter.

(6) "State" means Commonwealth of Kentucky.

(7) "Transmission line" means a pipeline, other than a gathering line that:

(a) Transports gas from a gathering line or storage facility to a distribution center, storage facility or large volume customer that is not down-stream from a distribution center;

- (b) Operates at a hoop stress of twenty (20) percent or more of SMYS; or
- (c) Transports gas within a storage field.

Section 2. Minimum Service Standards for Natural Gas Utilities Operating under the Jurisdiction of the Commission. (1) Utilities serving customers under KRS 278.485 or other retail customers, under the jurisdiction of the commission, directly from transmission or gathering lines shall be exempt from the following sections of this administrative regulation insofar as they apply to these customers:

- (a) Section 4;
- (b) Section 5; and
- (c) Section 6.

(2) Outage.

(a) Each utility shall make all reasonable efforts to prevent interruptions of service and if interruptions occur, shall endeavor to reestablish service with the shortest possible delay consistent with the safety of its consumers and the general public. Planned interruptions shall always be preceded by adequate notice to all affected customers.

(b) At the earliest practicable moment following discovery, each utility shall give notice to the commission of an outage that results in the loss of service to forty (40) or more customers for four (4) or more hours. Each notice shall be made by electronic mail to Pipeline.Safety@ky.gov and shall include:

1. Name of utility, person making the report, and contact telephone number;
2. Location of outage;
3. Time of outage; and
4. All other significant facts known by the utility that are relevant to the cause of the outage or extent of damage.

(c) Each notice made in accordance with this subsection shall be supplemented by a written report within thirty (30) days giving full details such as cause of the outage; number of customers affected by the outage; time when all service was restored; and steps, if any, taken to prevent reoccurrence.

Section 3. Minimum requirements for measurement of gas, accuracy of measuring meters, meter testing facilities and periodic testing of meters. (1) Method of measuring service.

(a) All gas sold by a utility and all gas consumed by a utility in the State of Kentucky shall be metered through meters that comply with this section except in cases of emergency or when otherwise authorized by the commission in accordance with Section 8 of this administrative regulation. Each meter shall bear an identifying number. If gas is sold at high pressures or large volumes, the contract or rate schedule shall specify standards used to calculate gas volume. Prepayment meters shall not be used unless there is no other satisfactory method of collecting payment for services rendered.

(b) All gas delivered as compensation for leases, rights-of-way, or for other reasons, not charged at the utility's regular schedule of charges, shall be metered and a record shall be kept of each transaction. All meters and regulators installed to measure gas and to regulate pressure of gas shall be under the control of the utility and subject to the rules of the utility and 807 KAR Chapter 5.

(c) The utility shall make no charge for furnishing and installing any meter or appurtenance necessary to measure gas furnished, except as approved by the commission in accordance with Section 8 of this administrative regulation or if duplicate or check meters are requested by the customer.

(d) Each gas utility shall adopt a standard method of meter and service line installation, if

practicable. These methods shall be set out with a written description and with drawings as necessary for clear understanding of the requirements, all of which shall be filed with the commission. Copies of these standard methods shall be made available to prospective customers, contractors, or others engaged in installing pipe for gas utilization. All meters shall be set in place by the utility.

(e) Each customer shall be metered separately except in cases of multioccupants under the same roof sharing a common entrance or an enclosure where it is unreasonable or uneconomical to measure each unit separately.

(f) The utility may render temporary service to a customer and may require the customer to bear all costs of installing and removing service in excess of any salvage realized. In this respect, temporary service shall be considered to be service that is not required or used for more than one (1) year.

(2) Accuracy requirements for meters. All tests to determine accuracy of registration of any gas meters shall be made by a meter tester certified in accordance with 807 KAR 5:006, Section 17, and with facilities that meet the requirements of subsection (3) of this section.

(a) Diaphragm displacement meters:

1. Before being installed for use by any customer, every diaphragm displacement gas meter, whether new, repaired, or removed from service for any cause shall be in good working condition and shall be adjusted to be correct to within one-half ( $1/2$ ) of one (1) percent, plus or minus when passing gas at approximately twenty (20) percent and 100 percent of the rated capacity of the meter as specified by the manufacturer based on five-tenths (0.5) inch water column differential. A pilot test or quartering test to determine that the meter will register at one-half ( $1/2$ ) of one (1) percent of the rated capacity shall be made before placing meters in service.

2. Meters removed from service for periodic testing shall be tested for accuracy as soon as practical after removal. An "as found" test shall be made at a flow-rate of approximately twenty (20) percent and 100 percent of the rated capacity of the meter based on five-tenths (0.5) inch water column differential and results of these tests algebraically averaged to determine accuracy. If error is less than two (2) percent, this shall be reported as the "as found" test. If error is more than two (2) percent, two (2) additional tests shall be made at twenty (20) percent and 100 percent, and the average of these three (3) tests shall be reported as the "as found" test. The three (3) test procedures shall apply to any customer request test, complaint test, or bill adjustment made on the basis of the meter.

3. Meters of good working condition that are removed from service for reasons other than periodic, customer, or commission request tests shall be tested as soon as practicable after removal if elapsed time since the last test exceeds fifty (50) percent of the periodic test period for those meters.

(b) Other than diaphragm displacement meters.

1. All meters other than diaphragm displacement meters shall be tested at the intervals required by subsection (4) of this section by the utility meter tester using flow provers or methods approved in accordance with the requirements of this section either in the shop or at the location of use at the utility's option and with facilities that meet the requirements of subsection (3) of this section. Accuracy of these meters shall be maintained as near 100 percent as possible. Test ranges and procedures shall be as prescribed in subsection (3) of this section.

2. All meter installations shall be inspected for proper design and construction and all instruments, regulators, and valves used in conjunction with installation shall be tested for desired operation and accuracy before being placed in service. This inspection shall be made by a qualified person. Test data as to conditions found, corrected if in error, and conditions as left shall be made available for inspection by commission staff. Subsequent test results shall be a

portion of regular meter test reports submitted to the commission by the utility.

(3) Meter testing facilities and equipment.

(a) Meter shop.

1. Each utility shall maintain a meter shop to inspect, test, and repair meters. The shop shall be open for inspection by commission staff at all reasonable times.

2. The meter shop shall consist of a repair room or shop proper and a proving room. The proving room shall be designed so that meters and meter testing apparatus are protected from excessive changes in temperature and other disturbing factors, such as humidity and dust. The proving room or the entire meter shop shall be air conditioned, if necessary, to achieve temperature control required by subparagraph (3) of this paragraph.

3. The proving room shall be well lighted and preferably not on an outside wall of the building. Temperatures within the proving room shall not vary more than two (2) degrees Fahrenheit per hour nor more than five (5) degrees Fahrenheit over a twenty-four (24) hour period.

(b) Working standards.

1. Each utility shall own and make proper provision to operate at least one (1) approved belltype meter prover, preferably of ten (10) cubic feet capacity, but not less than five (5) cubic feet capacity. The prover shall be equipped with suitable thermometers and other necessary accessories. This equipment shall be maintained in proper condition and adjustment so that it shall be capable of determining the accuracy of any service meter, practical to test by it, to within one-half (1/2) of one (1) percent plus or minus.

2. The prover shall be accurate to within three-tenths (0.3) of one (1) percent at each point used in testing meters.

3. The prover shall not be located near any radiator, heater, steam pipe, or hot or cold air duct. Direct sunlight shall not be allowed to fall on the prover or the meters under test.

4. During conditions of satisfactory operation air temperature in the prover shall be within one (1) degree Fahrenheit of the ambient temperature, and oil temperature in the prover shall not differ from the temperature of ambient air by more than one (1) degree Fahrenheit.

5. Meters to be tested shall be stored in a manner that temperature of the meters is substantially the same as temperature of the prover. To achieve this, meters shall be placed in the environment of the prover for a minimum of five (5) hours.

(c) All testing instruments and other equipment certified by the commission shall be accompanied at all times by a certificate showing the date when it was last tested and adjusted. The certificate shall be signed by a proper authority of the party providing the certification. A tag referring to the certificate may be attached to the instruments if practicable. These certificates, when superseded, shall be kept on file by the utility.

(d) Sixty (60) days after the effective date of a commission order granting convenience and necessity for a new utility, that utility shall advise the commission in writing as to kind and amount of testing equipment available.

(4) Periodic tests.

(a) Periodic tests of all meters shall be made according to the following schedule based on rated capacities. Rated meter capacity shall be defined as the capacity of the meter at five-tenths (0.5) of one (1) inch water column differential for diaphragm meters and as specified by the manufacturer for all other meters.

1. Positive-displacement meters, with rated capacity up to and including 500 cubic feet per hour, shall be tested at least once every ten (10) years.

2. Positive-displacement meters, with rated capacity above 500 cubic feet per hour, up to and including 1,500 cubic feet per hour, shall be tested at least once every five (5) years.

3. Positive-displacement meters above 1,500 cubic feet per hour shall be tested at least once every year.

4. Orifice meters shall have their recording gauges tested at least once every six (6) months. Orifice size and condition shall be checked at the required meter test interval.

5. Auxiliary measurement devices such as pressure, temperature, volume, load demand, and remote reading devices shall be tested at the required meter test interval as specified by the manufacturer.

(b) If the number of meters of any type which register in error beyond the limits specified in these rules is deemed excessive, this type shall be tested with an additional frequency as the commission may direct.

(c) A utility desiring to adopt a scientific sample meter test plan for positive displacement meters shall make its request in accordance with Section (8) of this administrative regulation. Upon approval, the sample testing plan may be followed instead of tests prescribed in subsections (2) and (4) of this section and 807 KAR 5:006, Section 17(1).

(5) Measuring production and shipment into and out of the state.

(a) The utility shall measure and record the quantity of all gas produced and purchased by it in Kentucky.

(b) The utility shall measure and record the quantity of all gas piped out of or brought into the state of Kentucky.

#### Section 4. Customer Service Line Extensions and Connections. (1) Extension of services.

(a) Normal extension. An extension of 100 feet or less shall be made by a utility to an existing distribution main without charge for a prospective customer who shall apply for and contract to use service for one (1) year or more and provides guarantee for the service.

(b) Other extensions.

1. If an extension of the utility's main to serve an applicant or group of applicants amounts to more than 100 feet per customer, the utility shall, if not inconsistent with its filed tariff, require the total cost of the excessive footage over 100 feet per customer to be deposited with the utility by the applicant, based on average estimated cost per foot of the total extension.

2. Each customer receiving service under this extension shall be reimbursed under the following plan: each year for a refund period of not less than ten (10) years, the utility shall refund to the customer who paid for the excessive footage, the cost of 100 feet of extension in place for each additional customer connected during the year whose service line is directly connected to the extension installed, and not to extensions or laterals therefrom. Total amount refunded shall not exceed the amount paid to the utility. After the end of the refund period, no refund shall be required.

(c) An applicant desiring an extension to a proposed real estate subdivision may be required to pay all costs of the extension. Each year for a refund period of not less than ten (10) years, the utility shall refund to the applicant who paid for the extension a sum equivalent to the cost of 100 feet of extension installed for each additional customer connected during the year. Total amount refunded shall not exceed the amount paid to the utility. After the end of the refund period from the completion of the extension, a refund shall not be required.

(d) Nothing contained in this administrative regulation shall be construed to prohibit the utility from making extensions under different arrangements if these arrangements have been included in the utility's tariff and approved by the commission.

(e) Nothing contained in this administrative regulation shall be construed to prohibit a utility from making, at its expense, greater extensions than prescribed, if the same free extensions are made to other customers under similar conditions.

(f) Upon complaint to and investigation by the commission, a utility may be required to construct extensions greater than 100 feet upon a finding by the commission that this extension is reasonable.

(2) Service connections.

(a) Ownership of service lines.

1. Utility's responsibility. When a utility establishes new service to a customer or an existing service line is repaired or replaced, the utility shall furnish and install at its own expense, for the purpose of connecting its distribution system to customer premises, the service line from its main to the meter, including the curb stop and curb box if used. If meters are located outdoors, the curb box and curb stop may be omitted if meter installation is provided with a stopcock and connection to the distribution main is made with a service tee that incorporates a positive shutoff device that can be operated with ordinary, readily available tools and the service tee is not located under pavement.

2. Customer's responsibility. The customer shall furnish and install necessary pipe to make the connection from the meter to place of consumption and shall keep the line in good repair and in accordance with reasonable requirements of the utility's rules and 807 KAR Chapter 5.

(b) All services shall be equipped with a stopcock near the meter. If the service is not equipped with an outside shutoff, the inside shutoff shall be of a type which can be sealed in the off position.

Section 5. Purity of Gas. (1) All gas supplied to customers shall not contain more than: a trace of hydrogen sulfide, thirty (30) grains of total sulphur per 100 cubic feet; or five (5) grains of ammonia per 100 cubic feet. Gas shall not contain impurities that may cause excessive corrosion of mains or piping or form corrosive or harmful fumes if burned in a properly designed and adjusted burner.

(2) If necessary, tests for the presence of hydrogen sulfide shall be made at least once each day, except Sundays and holidays, with equipment capable of measuring hydrogen sulfide levels as low as one (1) grain per 100 cubic feet. Results of these tests shall be retained and provided to the commission upon request.

(3) Manufactured and mixed gas shall be tested at least once each month for the presence of total sulphur and ammonia, except that any gas containing no coal gas shall not require testing for ammonia. Testing shall be in accordance with excepted American Society for Testing and Materials methodologies. Records of all tests shall be retained and provided to the Commission upon request.

Section 6. Heating Value of Gas. (1) Definitions of heating value. The heating value of gas shall be the number of British Thermal Units (BTUs) produced by the combustion at constant pressure, of that amount of gas that would occupy a volume of one (1) cubic foot at a temperature of sixty (60) degrees Fahrenheit:

(a) If saturated with water vapor;

(b) Under pressure equivalent to thirty (30) inches of mercury at a temperature of thirty-two (32) degrees Fahrenheit;

(c) Under gravity;

(d) With air of the same temperature and pressure as the gas;

(e) When the products of combustion are cooled to the initial temperature of the gas and air; and

(f) When the water formed by combustion is condensed to liquid stage.

(2) Each utility shall establish and maintain a standard heating value for its gas. The heating value standard adopted shall comply with the following:

(a) It shall be consistent with good service as specified in the utility's tariff approved by the Commission.

(b) It shall be that value that the utility determines is most practical and economical to supply

to its customers.

(3) Each utility shall file with the commission its standard heating value as part of its schedule of Rates, Rules and Regulations.

(4) The utility shall maintain the heating value of the gas with as little variation as practicable, but this variation shall not be more than five (5) percent above or below the established standard heating value.

(5) The heating value standard shall be the monthly average heating value of gas delivered to customers at any point within one (1) mile of the center of distribution, and shall be obtained in the following manner: results of all tests for heating value made on any day during the calendar month shall be averaged, and the average of all such daily averages shall be used in computing the monthly average.

(6) Each utility, selling more than 300,000,000 cubic feet of gas annually, shall maintain a calorimeter, gas chromatograph, or other equipment for testing the heating value of gas or shall retain the services of a testing laboratory. All testing equipment shall be accompanied at all times by a certificate showing the date it was last tested and adjusted. Utilities served directly from a transmission line shall be exempt from this rule if there is approved equipment for measuring the heating value of gas maintained by the transmission company and if this equipment is available for testing and certification by the commission.

(7) Each utility shall conduct tests and maintain necessary records to document that the requirements of this section are being met. Those utilities that bill on the basis of heating value shall, as part of its schedule of Rates, Rules and Regulations, file with the commission the schedule of tests and test procedures it will conduct to determine the heating value of its gas.

(8) Any change in heating value greater than that allowed in subsection (4) of this section shall not be made without a change to the utility's tariff approved by the commission and without adequate notice to affected customers. In this event, the utility shall make any adjustments to the customer's appliances without charge and shall conduct the adjustment program with a minimum of inconvenience to the customer.

Section 7. Waste. All practices in the production, distribution, consumption, or use of natural gas that are wasteful shall be expressly prohibited.

Section 8. Deviations from Rules. In special cases for good cause shown the commission may permit deviations from these rules.

This is to certify that the Public Service Chairman has reviewed and recommended this administrative regulation prior to its adoption, as required by KRS 278.040(3). (10 Ky.R. 1029; eff. 3-31-1984; 16 Ky.R. 1994; eff. 5-13-1990; TAm 1-30-2013; 44 Ky.R. 2405; 45 Ky.R. 62; eff. 8-6-2018; Crt eff. 3-27-2019.)